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CP2176
PATENT

JUL 2 9 2002

Case Docket No. BSTOR.037A Date: July 23, 2002

Technology Center 2100

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	:	Ulrich, et al.	,	I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope
Appl. No.	:	10/060,863)	addressed to: United States Patent and Trademark Office, P.O. Box 2327, Arlington, VA 22202, on
Filed	:	January 29, 2002))	July 23, 2002 (Date)
For	:	ENHANCED DISK ARRAY)))	Lee W. Henderson Ph.D., Reg. No. 41,830
Examiner	:	Unknown))	
Group Art Unit	:	2176))	

TRANSMITTAL LETTER

United States Patent and Trademark Office P.O. Box 2327 Arlington, VA 22202

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) Power of Attorney and copies of Assignments.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Lee W. Henderson Ph.D. Registration No. 41,830 Attorney of Record

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Broadband Storag	e, LLC)	A. A.
App. No.	:	Listed Below		.))	Company of the
Filed	:	January 29, 2002)	ON COPIEC STOO
For	:	Listed Below	!)	2700
Examiner	:	Unknown))	

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION AND REVOCATION AND POWER OF ATTORNEY

United States Patent and Trademark Office P.O. Box 2327 Arlington, VA 22202

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee") for the following cases:

Application	Title	Our Ref. No.
No.		
10/060,686	DYNAMIC DATA RECOVERY	BSTOR.035A
10/060,858	INTEGRATED DISTRIBUTED FILE SYSTEM WITH VARIABLE	BSTOR.041A
	PARITY GROUPS	
10/060,863	ENHANCED DISK ARRAY	BSTOR.037A
10/060,874	DYNAMIC REDISTRIBUTION OF PARITY GROUPS	BSTOR.034A
10/060,878	PROGRAMMABLE DATA PATH ACCELERATOR	BSTOR.030A
10/060,879	REDUNDANT DYNAMICALLY DISTRIBUTED FILE SYSTEM	BSTOR.023A
10/060,903	INTERFACE ARCHITECTURE	BSTOR.031A
10/060,908	REPLACING FILE SYSTEM PROCESSORS BY HOT SWAPPING	BSTOR.024A
10/060,911	DATA PATH ACCELERATOR WITH VARIABLE PARITY, VARIABLE	BSTOR.032A
	LENGTH, AND VARIABLE EXTENT PARITY GROUPS	
10/060,916	ENHANCING DISK ARRAY PERFORMANCE VIA VARIABLE PARITY	BSTOR.040A
	BASED LOAD BALANCING	
10/060,918	ENHANCING FILE SYSTEM PERFORMANCE	BSTOR.027A
10/060,919	ENHANCED FILE SYSTEM FAILURE TOLERANCE	BSTOR.036A
.10/060,920	FILE SYSTEM METADATA	BSTOR.026A
10/060,921	DATA BLOCKING MAPPING	BSTOR.033A

App. No. Filed

Application	Title	Our Ref. N .
No.		-
10/060,939	DISK REPLACEMENT VIA HOT SWAPPING WITH VARIABLE PARITY	BSTOR.039A
10/060,947	HOT ADDING FILE SYSTEM PROCESSORS	BSTOR.025A
10/060,956	DATA PATH CONTROLLER ARCHITECTURE	BSTOR.029A
10/060,957	DYNAMICALLY SCALABLE DISK ARRAY	BSTOR.038A
10/060,977	DATA PATH ACCELERATOR FOR STORAGE SYSTEMS	BSTOR.028A

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, Sixteenth Floor, Newport Beach, California 92660, Telephone (949) 760-0404, Customer No. 20,995, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use Customer No. 20,995 for all communications.

Broadband Storage, LLC

Dated: April 24 12002

Title:

Address: 5141 California, Suite 200

Irvine, CA 92612

H:\DOCS\LWH\LWH-7320.DOC:jk 042202

" Do Not Record"

.

PATENT

Client Code: BSTOR.000GEN

Application Nos.: 10/060,686; 10/060,858; 10/060,863; 10/060,874

10/060,878; 10/060,879; 10/060,939; 10/060,911; 10/060,916; 10/060,939; 10/060,947

10/060,956; 10/060,957; 10/060,977

Filing Date: January 29, 2002

Page 1

ASSIGNMENT

WHEREAS, I, George W. Priester, a U.S. citizen, residing at 15811 Butterfield Street, Westminster, CA 92683 have invented certain new and useful improvements in computer storage systems for which we have filed applications for Letters Patent in the United States as follows:

Application	Title	Filed
No.	·	
10/060,686	DYNAMIC DATA RECOVERY	January 29, 2002
10/060,858	INTEGRATED DISTRIBUTED FILE SYSTEM WITH VARIABLE PARITY	January 29, 2002
	GROUPS	
10/060,863	ENHANCED DISK ARRAY	January 29, 2002
10/060,874	DYNAMIC REDISTRIBUTION OF PARITY GROUPS	January 29, 2002
10/060,878	PROGRAMMABLE DATA PATH ACCELERATOR	January 29, 2002
10/060,879	REDUNDANT DYNAMICALLY DISTRIBUTED FILE SYSTEM .	January 29, 2002
10/060,903	INTERFACE ARCHITECTURE	January 29, 2002
10/060,908	REPLACING FILE SYSTEM PROCESSORS BY HOT SWAPPING	January 29, 2002
10/060,911	DATA PATH ACCELERATOR WITH VARIABLE PARITY, VARIABLE	January 29, 2002
	LENGTH, AND VARIABLE EXTENT PARITY GROUPS	
10/060,916	ENHANCING DISK ARRAY PERFORMANCE VIA VARIABLE PARITY	January 29, 2002
	BASED LOAD BALANCING	
10/060,919	ENHANCED FILE SYSTEM FAILURE TOLERANCE	January 29, 2002
10/060,920	FILE SYSTEM METADATA	January 29, 2002
10/060,921	DATA BLOCKING MAPPING ((())	January 29, 2002
10/060,930	DYNAMICALLY DISTRIBUTED FILE SYSTEM	January 29, 2002
10/060,939	DISK REPLACEMENT VIA HOT SWAPPING WITH VARIABLE PARITY	January 29, 2002
10/060,947	HOT ADDING FILE SYSTEM PROCESSORS	January 29, 2002
10/060,956	DATA PATH CONTROLLER ARCHITECTURE	January 29, 2002
10/060,957	DYNAMICALLY SCALABLE DISK ARRAY	January 29, 2002
10/060,977	DATA PATH ACCELERATOR FOR STORAGE SYSTEMS	January 29, 2002

AND WHEREAS, Broadband Storage, LLC (hereinafter "ASSIGNEE"), a California Corporation, with its principal place of business at 5141 California, Suite 200, Irvine, CA 92612, desires to acquire the entire right, title, and interest in and to the said improvements and the said Applications:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, or other good and valuable consideration, the receipt of which is hereby acknowledged, I, said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said applications and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States of the United States, whose duty it is to issue patents on

applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 24 day of April , 2002

George WPriester

William 6 PRIESTY

Votary Signature

STATE OF CHIEFTINA SS.

On 49408, before me, Cyffill Mary, personally appeared George We Priester personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(les), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

H:\DOCS\LWH\LWH-7319.DOC:jk 042202 CYNTHIA SALAZAR
Commission # 125048
Notory Public - Collorate
Orange County
My Comm. Biplies Nov 11,2004



Client Code: BSTOR.000GEN

Application Nos.: 10/060,686; 10/060,858; 10/060,863; 10/060,874 10/060,878; 10/060,879; 10/060,903; 10/060,908 10/060,911; 10/060,916; 10/060,918; 10/060,919

10/060,920; 10/060,921; 10/060,930; 10/060,939 10/060,947; 10/060,956; 10/060,957; 10/060,977

Filing Date: January 29, 2002 Page 1

ASSIGNMENT

WHEREAS, We, Gregory D. Bolstad, a U.S. citizen, residing at 2580 Calle Belmonte, Tustin, CA 92782; and; John R. Staub, a U.S. citizen, residing at 2101 15th Street, Unit #11, Newport Beach, CA 92663 have invented certain new and useful improvements in computer storage systems for which we have filed applications for Letters Patent in the United States as follows:

Application	Title	Filed
No.		
10/060,686	DYNAMIC DATA RECOVERY	January 29, 2002
10/060,858	INTEGRATED DISTRIBUTED FILE SYSTEM WITH VARIABLE PARITY	January 29, 2002
	GROUPS	
10/060,863	ENHANCED DISK ARRAY	January 29, 2002
10/060,874	DYNAMIC REDISTRIBUTION OF PARITY GROUPS	January 29, 2002
10/060,878	PROGRAMMABLE DATA PATH ACCELERATOR	January 29, 2002
10/060,879	REDUNDANT DYNAMICALLY DISTRIBUTED FILE SYSTEM	January 29, 2002
10/060,903	INTERFACE ARCHITECTURE	January 29, 2002
10/060,908	REPLACING FILE SYSTEM PROCESSORS BY HOT SWAPPING	January 29, 2002
10/060,911	DATA PATH ACCELERATOR WITH VARIABLE PARITY, VARIABLE	January 29, 2002
	LENGTH, AND VARIABLE EXTENT PARITY GROUPS	
10/060,916	ENHANCING DISK ARRAY PERFORMANCE VIA VARIABLE PARITY	January 29, 2002
	BASED LOAD BALANCING	
10/060,918	ENHANCING FILE SYSTEM PERFORMANCE	January 29, 2002
10/060,919	ENHANCED FILE SYSTEM FAILURE TOLERANCE	January 29, 2002
10/060,920	FILE SYSTEM METADATA	January 29, 2002
10/060,921	DATA BLOCKING MAPPING	January 29, 2002
10/060,930	DYNAMICALLY DISTRIBUTED FILE SYSTEM	January 29, 2002
10/060,939	DISK REPLACEMENT VIA HOT SWAPPING WITH VARIABLE PARITY	January 29, 2002
10/060,947	HOT ADDING FILE SYSTEM PROCESSORS	January 29, 2002
10/060,956	DATA PATH CONTROLLER ARCHITECTURE	January 29, 2002
10/060,957	DYNAMICALLY SCALABLE DISK ARRAY	January 29, 2002
10/060,977	DATA PATH ACCELERATOR FOR STORAGE SYSTEMS	January 29, 2002

AND WHEREAS, Broadband Storage, LLC (hereinafter "ASSIGNEE"), a California Corporation, with its principal place of business at 5141 California, Suite 200, Irvine, CA 92612, desires to acquire the entire right, title, and interest in and to the said improvements and the said Applications:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, or other good and valuable consideration, the receipt of which is hereby acknowledged, We, said inventors, do hereby acknowledge that We have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said applications and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all

extensions, renewals and reissues thereof; and We hereby authorize and request the commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that We will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 24 day of 4pc, 2002
Gregory D. Bolstad
STATE OF (Ubefornin) ss.
On
[SEAL] CYNTHIA SALAZAR Commission # 1220488 Notory Public - Coffordia Oronge County My Comm. Beptes Nov 11, 2004
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 24 day of April , 2002.
John R. Staub
STATE OF CALLOT IN SS.
on 43410 degree me, which instrument the person of the entity upon behalf of which the person (s) acted, executed the instrument.
WITNESS my hand and official seal. [SEAL]
H:\DOCS\LWH\LWH-7316.DOC:jk 042202 CYNTHIA SALAAR Commission # 1260465

Client Code: BSTOR.000GEN

Application Nos.: 10/060,686; 10/060,858; 10/060,863; 10/060,874 10/060,878; 10/060,879; 10/060,908; 10/060,911

10/060,916; 10/060,918; 10/060,919; 10/060,920 10/060,921; 10/060,930; 10/060,939; 10/060,947

10/060,956; 10/060,957; 10/060,977

Filing Date: January 29, 2002

Page 1

ASSIGNMENT

WHEREAS, We, Thomas R. Ulrich, a U.S. citizen, residing at 18 Obispo, Rancho Santa Margarita, CA 92688; James R. Schweitzer, a U.S. citizen, residing at 4732 Arena Circle, Huntington Beach, CA 92649; and Jay G. Randall, a U.S. citizen, residing at 200 142 md Street #B, Newport Beach, CA 92663; have invented certain new and useful improvements in computer storage systems for which we have filed applications for Letters Patent in the United States as follows:

Application	Title	Filed
No.		
10/060,686	DYNAMIC DATA RECOVERY	January 29, 2002
10/060,858	INTEGRATED DISTRIBUTED FILE SYSTEM WITH VARIABLE PARITY	January 29, 2002
	GROUPS	
10/060,863	ENHANCED DISK ARRAY	January 29, 2002
10/060,874	DYNAMIC REDISTRIBUTION OF PARITY GROUPS	January 29, 2002
10/060,878	PROGRAMMABLE DATA PATH ACCELERATOR	January 29, 2002
10/060,879	REDUNDANT DYNAMICALLY DISTRIBUTED FILE SYSTEM	January 29, 2002
10/060,908	REPLACING FILE SYSTEM PROCESSORS BY HOT SWAPPING	January 29, 2002
10/060,911	DATA PATH ACCELERATOR WITH VARIABLE PARITY, VARIABLE	January 29, 2002
	LENGTH, AND VARIABLE EXTENT PARITY GROUPS	
10/060,916	ENHANCING DISK ARRAY PERFORMANCE VIA VARIABLE PARITY	January 29, 2002
	BASED LOAD BALANCING	
10/060,918	ENHANCING FILE SYSTEM PERFORMANCE	January 29, 2002
10/060,919	ENHANCED FILE SYSTEM FAILURE TOLERANCE	January 29, 2002
10/060,920	FILE SYSTEM METADATA	January 29, 2002
10/060,921	DATA BLOCKING MAPPING	January 29, 2002
10/060,930	DYNAMICALLY DISTRIBUTED FILE SYSTEM	January 29, 2002
10/060,939	DISK REPLACEMENT VIA HOT SWAPPING WITH VARIABLE PARITY	January 29, 2002
10/060,947	HOT ADDING FILE SYSTEM PROCESSORS	January 29, 2002
10/060,956	DATA PATH CONTROLLER ARCHITECTURE	January 29, 2002
10/060,957	DYNAMICALLY SCALABLE DISK ARRAY	January 29, 2002
10/060,977	DATA PATH ACCELERATOR FOR STORAGE SYSTEMS	January 29, 2002

AND WHEREAS, Broadband Storage, LLC (hereinafter "ASSIGNEE"), a California Corporation, with its principal place of business at 5141 California, Suite 200, Irvine, CA 92612, desires to acquire the entire right, title, and interest in and to the said improvements and the said Applications:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, or other good and valuable consideration, the receipt of which is hereby acknowledged, We, said inventors, do hereby acknowledge that We have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said applications and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all

extensions, renewals and reissues hereof; and We hereby authorize and request the commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that We will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

CYNTHIA SALAZAR
Commission # 1290488
Notary Public - Cofficients
Orange County
My Comm. Egales Nov 11, 2004

IN TESTIMONY WHEREOF, I he unto set my hand and seal	this <u>24⁺¹</u> day of <u>9,7r:1</u> , 20 <u>62</u>
•	Jun Havre
•	Jay G. Randall
STATE OF CALIFORNIA) ss.	
COUNTY OF O PANGE SS.	
On 412402, before me, Jay 6. 7 personally known to me (or proved to me on the basis of sati	personally appeared Jay G. Randall stactory evidence) to be the person(8) whose name(8) is/a/s.
subscribed to the within instrument, and acknowledged to me t	that he executed the same in his authorized capacity(ies), and
that by his signature (s) on the instrument the person(s), or the	entity upon behalf of which the person(s) acted, executed the
instrument.	. //
WITNESS my hand and official seal.	$\wedge \wedge $
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[SEAL]	Notary Signature
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Commission	# 120048
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Application Nos.: 10/060,878; 10/060,903; 10/060,911; 10/060,956 Client Code: BSTOR.000GEN

Filing Date: January 29, 2002

Page 1

ASSIGNMENT

WHEREAS, We, David H. Barry, a U.S. citizen, residing at 1306 E. Corbett Drive, Placentia, CA 92870; Leonard D. Olsen, a U.S. citizen, residing at 525 S. Peralta Hills Drive, Anaheim, CA 92807; Danny Lam, a U.S. citizen, residing at 15682 Starboard Street, Garden Grove, CA 92843; and Ronald K. Godshalk, Jr., a U.S. citizen, residing at 466 Kiolstad Drive, Placentia, CA 92870 have invented certain new and useful improvements in computer storage systems for which we have filed applications for Letters Patent in the United States as follows:

Application	Title	Filed
No.	!	
10/060,878	PROGRAMMABLE DATA PATH ACCELERATOR	January 29, 2002
10/060,903	INTERFACE ARCHITECTURE	January 29, 2002
10/060,911	DATA PATH ACCELERATOR WITH VARIABLE PARITY, VARIABLE	January 29, 2002
	LENGTH, AND VARIABLE EXTENT PARITY GROUPS	
10/060,956	DATA PATH CONTROLLER ARCHITECTURE	January 29, 2002

AND WHEREAS, Broadband Storage, LLC (hereinafter "ASSIGNEE"), a California Corporation, with its principal place of business at 5141 California, Suite 200, Irvine, CA 92612, desires to acquire the entire right, title, and interest in and to the said improvements and the said Applications:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, or other good and valuable consideration, the receipt of which is hereby acknowledged, We, said inventors, do hereby acknowledge that We have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said applications and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and We hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that We will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

